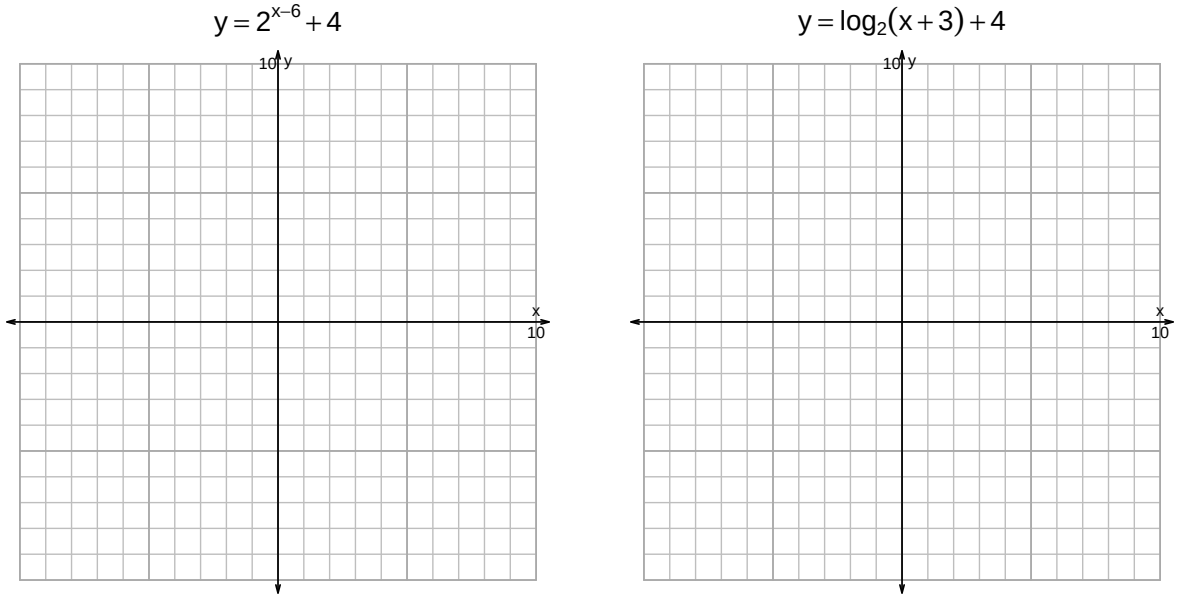
Name: Date:

s18quiz: EXP LOG (Practice v143)

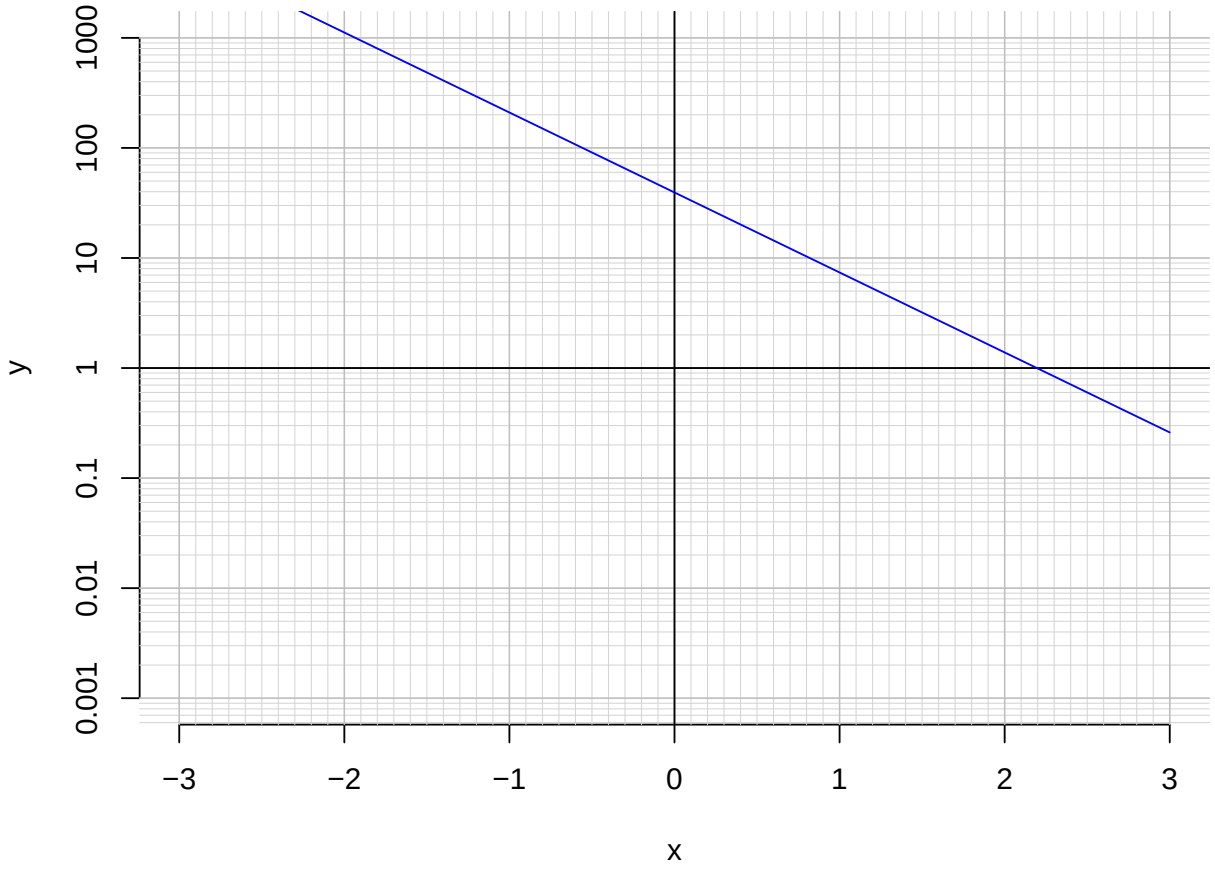
1. Graph $y = 2^{x-6} + 4$ and $y = \log_2(x+3) + 4$ on the grids below. Also, draw any asymptotes with dotted lines.



2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$19 = \left(\frac{5}{4}\right) \cdot 2^{7t/3}$$

3. An exponential function $f(x) = 39.4 \cdot e^{-1.67x}$ is graphed below on a semi-log plot.



a. Using the plot above, evaluate $f(2.5)$.

b. Express $f^{-1}(x)$, the inverse of f.

c. Using the plot above, evaluate $f^{-1}(800)$.